

## ACKNOWLEDGEMENTS

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22. PARASITIC INFESTATION OF THE CLAM, *MARCIA OPIMA* (GMELIN)

Reproductive studies on the clam *Marcia opima* from two geographically separated areas were conducted at the Tuticorin Research Centre of Central Marine Fisheries Research Institute. The clams were collected from Tuticorin Bay, Tamil Nadu (8° 45' N and 78° 12' E) and from Ashtamudi Lake, Quilon (9° 28' N and 76° 28' E). Sampling was done from December, 1998 to January, 2000. To identify the sex and maturity stages of the collected clams, gonad smears were observed under a microscope.

During the course of the study, infestation of the gonad by the larvae of trematode parasite *Bucephalus* sp. was observed in the clams collected from Tuticorin Bay. Infestation was noticed during December 1998, January 1999 and May 1999. The lengths of the infested clams ranged from 31.6 mm to 34.6 mm. The percentage of infection ranged from 5 % to 10% of the total sampled population.

There was no trematode infestation in the clams collected from Ashtamudi lake. However, a single incidence of fungal infection was observed in a clam 51 mm long in March, 1999. In May 1999, 10% of the sampled clams, with length ranging from 34.8 mm to 40.7 mm, were found to be infested by the pea-crab, *Pinnotheres* sp.

Bucephalid infestation in *Meretrix casta* was reported by Durve (1964). Silas and Alagarswami (1967) and Harkantra (1976) reported *Pinnotheres* infestation in *Meretrix casta*. Thangavelu and Sanjeevaraj (1985) reported occasional occurrence of larval forms of the trematode parasite *Bucephalus haemanus* in *M. casta*. Hesselman *et al.* (1989)

observed trematode infestation in *Mercenaria* sp. Parasitic infestation of the clam *M. opima* has not been reported earlier, and this is the first report.

In the present study, it was observed that the presence of parasites caused gonad destruction. Hence, the sex of the infested clams could not be made out. The meat of the clams was found to be thin, transparent and watery. The same manifestations were observed by earlier workers also.

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23. ADDITIONS TO THE GRASS FLORA OF TAMIL NADU

While working on the flora of Mukurthi National Park (11° 10'-11° 22' N, 76° 26'-76° 34' E) and the Tropical Gene Pool Garden, Nadugani (11° 15'-11° 39' N, 76° 15'-76° 30' E) Nilgiris, Western Ghats, Tamil Nadu, we came across four rare, endemic and interesting grasses. On critical examination, they were identified as *Arthraxon lancifolius* (Trin.) Hochst., *Bothriochloa parameswaranii* Sreekumar *et al.*, *Eragrostis zeylanica* Nees & Mey. and *Isachne gracilis* C.E. Hubb. The voucher specimens are deposited in the Herbarium of Kongunadu Arts & Science College, Coimbatore for reference.

*Arthraxon lancifolius* (Trin.) Hochst, in *Flora* 39: 188. 1856; Fischer in *Gamble, Fl. Pres. Madr.* 1729. 1934 (Repr.

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So far, this grass is reported only from the states of Andhra Pradesh, Gujarat, Karnataka, Kerala and Maharashtra. The available literature pertaining to the grass flora of Tamil Nadu has not included this species. Hence, the present

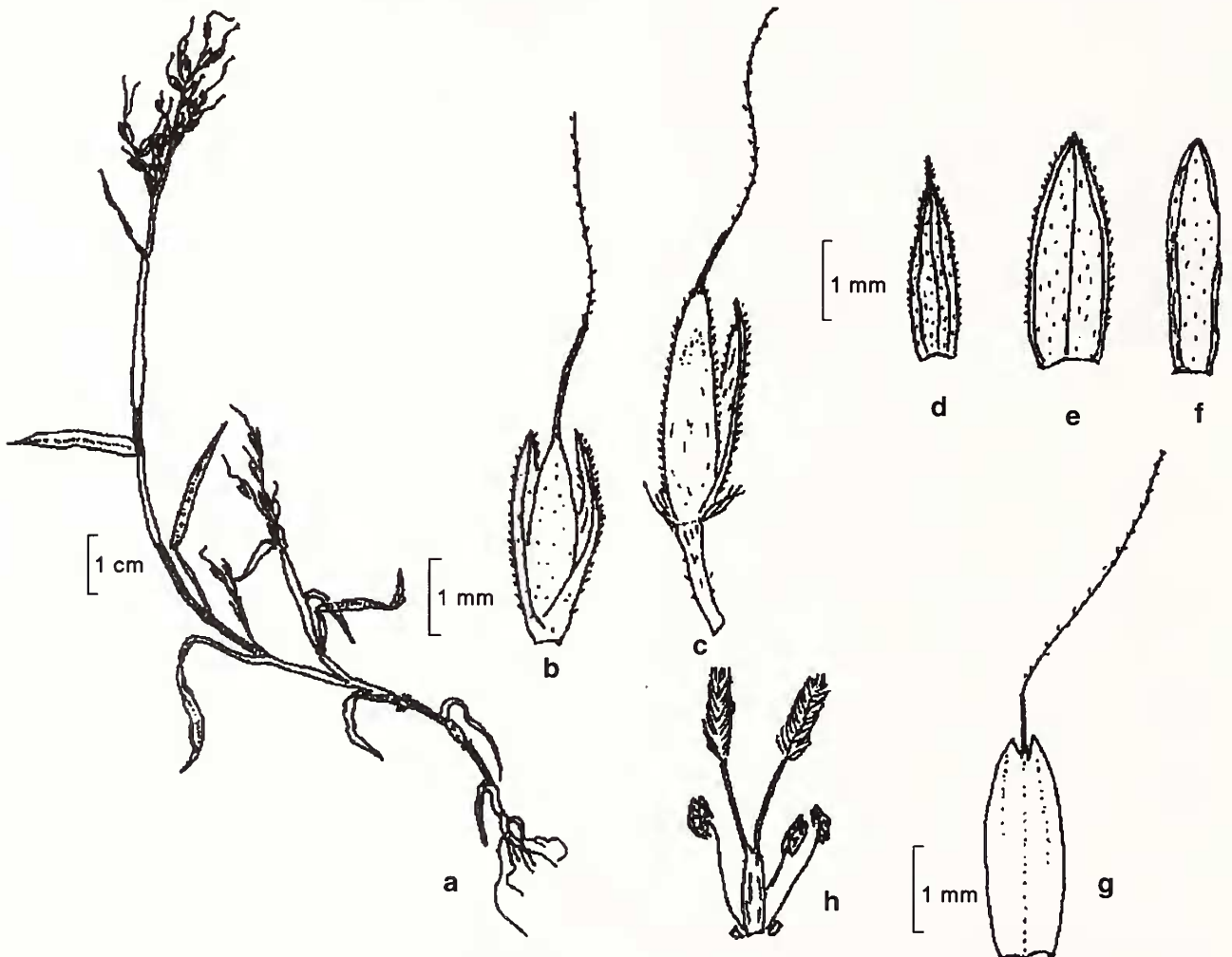


Fig. 1: *Arthraxon lancifolius* (Trin.) Hochst., a. Habit; b. Sessile Spikelet; c. Pedicelled Spikelet; d. Lower Glume; e. Upper Glume; f. First Lemma; g. Second Lemma; h. Stamen and Pistil